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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,747	10/27/2000	Edward W. Jackson	7045.16	6817

21999 7590 01/03/2003

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EXAMINER

RUDNICK, DOUGLAS W

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 01/03/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/698,747

Applicant(s)

JACKSON, EDWARD W.

Examiner

Douglas W. Rudnick

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis et al (US 4966757).

With respect to claim 1:

Lewis et al. discloses:

Means for controllably generating sulphur gases on-site and on-demand from combustion of elemental sulphur (Abstract).

Means for passively introducing the generated sulphur gases with differential pressure into a pressurized stream of aqueous solution to create sulphurous acid (Abstract and claim 1).

With respect to claim 2:

Lewis et al. discloses:

Means for generating sulphurous acid on-site and on-demand from combustion of elemental sulphur (Abstract).

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Means for passively introducing the sulphurous acid with differential pressure into a pressurized line (Abstract and claim 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. in view of Samejima et al. (US 4643808).

With respect to claim 3:

Lewis et al. discloses the invention substantially as claimed. Lewis et al. discloses means for controllably generating sulphurous acid on-site and on-demand from combustion of elemental sulphur and the means for introducing sulphurous acid with differential pressure into an aqueous solution (Abstract and claim 1). However,

Lewis et al. is silent to the teaching of the sulphurous acid being capable of dechlorination.

Samejima et al. teaches the use of sulphurous acid to dechlorinate (Col. 3, lines 47-55) for the purpose of sulphurous acid being a good reducing agent.

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have provided sulphurous acid being used for dechlorination in Lewis et al. in order to have a good reducing agent as taught by Samejima et al.

With respect to claims 4-6:

Lewis et al. discloses the invention substantially as claimed. Lewis et al. discloses controllably generating sulphur gases and sulphurous acid on-site and on-demand from combustion of elemental sulphur (Abstract and claim 1). Lewis et al. also discloses passively introducing the sulphur gases with differential pressure into a pressurized stream to make sulphurous acid and passively introducing the sulphurous acid with differential pressure into a pressurized line (Abstract and claim 1). However, Lewis et al. is silent to the teaching of the sulphurous acid being capable of dechlorination.

Samejima et al. teaches the use of sulphurous acid to dechlorinate (Col. 3, lines 47-55) for the purpose of sulphurous acid being a good reducing agent.

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to have provided sulphurous acid being used for

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dechlorination in Lewis et al. in order to have a good reducing agent as taught by Samejima et al.

Response to Arguments

6. Applicant's arguments filed 10-23-02 have been fully considered but they are not persuasive.

7. Applicants point out that no reference provides the limitation of introducing the gases or acids passively with a differential pressure. Applicants point out that Lewis et al. uses negative pressure conditions to achieve the same results. A negative pressure by definition **IS** a differential pressure. A differential pressure is one area having higher or lower pressure than another area causing movement or flow. That is exactly what is occurring in Lewis et al. In this case, the differential pressure happens to be negative. Because of this negative differential pressure, the acid or gas is passively (by applicants' definition) drawn into the resulting streams.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


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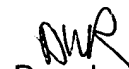
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas W. Rudnick whose telephone number is 703-305-3141. The examiner can normally be reached on M-F (8:30 am - 5:30 pm) alt. fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 703-308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Glenn Caldarola
Supervisory Patent Examiner
Technology Center 1700


Douglas W. Rudnick
Art Unit 1764

dwr
December 20, 2002